

Economic Commission for Latin America and the Caribbean

# ECLAC SUBREGIONAL HEADQUARTERS FOR THE CARIBBEAN



## Report of the seminar on measuring digital inclusion in the Caribbean



UNITED NATIONS

ECLAC





UNITED NATIONS



**Economic Commission for Latin America and the Caribbean  
Subregional Headquarters for the Caribbean**

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Seminar on measuring digital inclusion in the Caribbean  
Virtual meeting, 15–16 December 2022

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ORIGINAL: ENGLISH

## **REPORT OF THE SEMINAR ON MEASURING DIGITAL INCLUSION IN THE CARIBBEAN**

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## **A. ATTENDANCE AND ORGANIZATION OF WORK**

### **1. Place and date**

1. The Economic Commission for Latin American and the Caribbean (ECLAC) subregional headquarters for the Caribbean convened a virtual seminar, entitled “Measuring digital inclusion in the Caribbean” on 15 and 16 December 2022. The programme is available in annex II of this report.

### **2. Attendance<sup>1</sup>**

2. Representatives from six member States: Antigua and Barbuda, Belize, Grenada, Jamaica, Saint Lucia and Saint Vincent and the Grenadines and two associate members: Aruba and British Virgin Islands, attended the online seminar. Also in attendance were representatives from the Caribbean Telecommunications Union (CTU), the Eastern Caribbean Telecommunications Authority (ECTEL), Jamaica Productivity Centre and University of the Republic - Uruguay, as well as a digital inclusion consultant. In total, seventeen participants at the seminar, eight of whom were female. The list of participants is available in annex I of this report.

### **3. Meeting agenda**

#### Day 1

1. Opening of the meeting
2. Participant introductions
3. Presentation 1: Importance of digital inclusion to the Caribbean
4. Presentation 2: Digital inclusion in the United Nations system
5. Discussion on presentations 1 and 2: Measuring digital inclusion – initial thoughts and questions

#### Day 2

1. Presentation 3: Internet speed divides in the Caribbean
2. Presentation 4: Deep dive into Caribbean digital divides
3. Discussion on presentations 3 and 4: Digital divides
4. Presentation 5: Overview of measurement approaches
5. Presentation 6: Overview of multi-country measurement frameworks related to digital inclusion
6. Discussion on presentations 5 and 6: Measuring digital inclusion in the Caribbean – key considerations and needs
7. Conclusion and closing remarks

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<sup>1</sup> See annex I for a full list of participants.

#### 4. Objective

3. The overall objective of the seminar was to provide a space for discussion among technical and policy experts on ways to further digital inclusion efforts at the national and regional levels. It was intended as an introductory level seminar, to allow participants to gain a common understanding of digital inclusion.

### B. SUMMARY OF PROCEEDINGS

#### 1. Opening of the meeting

4. The Programme Management Officer of the Caribbean Knowledge Management Centre (CKMC) at ECLAC subregional headquarters for the Caribbean welcomed participants to the seminar and delivered the opening remarks on behalf of the Director, who was on official mission to ECLAC headquarters in Santiago, Chile. In her remarks, the Director extended her gratitude to the attendees for their participation at the seminar and provided a synopsis of the Commission's involvement with the policy issues surrounding digital inclusion in the small island developing States (SIDS) of the Caribbean. To that end, she reflected on the conclusions and recommendations of the study, "Digital inclusion in Caribbean digital transformation frameworks and initiatives: a review", and the feedback which participants to the associated expert group meeting offered for its improvement. She indicated that this seminar was another instalment in the digital inclusion research agenda of the office, particularly having regard the impact of the recent acceleration of digital transformation across societies in response to the COVID-19 pandemic. She noted that the outcome of that response revealed "existing disparities and inequalities" and "amplified existing societal challenges, particularly for the marginalized and vulnerable, including older persons." This was at variance with two of the key principles of the 2030 Agenda to "leave no one behind" and to "reach the furthest behind first". In this regard, she contended that there is a need for digital inclusion to be prioritized as public policy and for the context and situation in each country of the subregion to be understood. This was particularly relevant, in light of global targets, such as those set in the Digital Agenda for Latin America and the Caribbean (eLAC2024) which is seeking to achieve the "digital age for all".

5. In closing, the Director asserted that the seminar was designed to enable participants to "better understand the linkages between digital inclusion and sustainable development" as well as to learn about "several measurement frameworks and approaches related to digital inclusion" which can support their application of measurement frameworks that are best suited for their countries. She, therefore, anticipated that participants would find the seminar meaningful and that there would be a rich exchange of views and valuable feedback.

6. Seminar participants were then invited to briefly introduce themselves and share their interest in digital inclusion.

#### 2. Presentation 1: Importance of digital inclusion to the Caribbean

7. The first presentation was delivered by the Programme Management Officer, who signalled that digital inclusion will be the focus of the CKMC research agenda for the next two years. Referencing the previous study "Digital inclusion in Caribbean digital transformation frameworks and initiatives", he noted that most countries did not appear to formally have digital inclusion as a policy directive within their information and communications technology (ICT) agenda. Although inclusion had been identified as a guiding value of some national development plans (NDPs), digital inclusion was not ascribed a priority in most countries. Participants were reminded that digital inclusion and digital transformation offer many opportunities to governments and people, such as access to information services, work, trade and more. The recent COVID-19 pandemic saw the acceleration of the movement of services and activities into the digital realm by governments and businesses.

8. Using an example from a recent report of the Inter-American Development Bank (IDB), he underscored the need for digital inclusion, highlighting the possibility that closing the digital access gap could result in GDP growth of 6–17% and an 80% gain in productivity in Caribbean countries. He lamented the existing link between digital exclusion and inequality, predicting that people and countries will find it increasingly difficult to play catch up if greater effort is not made to embrace digital technologies. He noted that the pandemic further marginalized vulnerable groups such as women, girls, youth, elderly and persons with disabilities, who were identified as being the most affected by digital exclusion. Such exclusion had a negative impact on the achievement of Sustainable Development Goal (SDG) 10, which seeks to “reduce inequality within and among countries”.

9. Reference was made to Plan Ceibal, a Uruguayan initiative, which aimed to provide a laptop to every primary school child as a project that directly countered the affordability limitation for citizens and increased accessibility in that country. Moreover, he also called for clear attempts to prioritize digital inclusion in the ICT agendas in the Caribbean and that concerted efforts need to be made to accurately identify the digitally excluded, noting that this will vary for different countries. Noteworthy also is the strategy, Digital Agenda for Latin America and the Caribbean (eLAC 2024) and the targets therein which support policymaking, including digital inclusion and the digital development for the region by 2024.

10. He noted that as countries made greater efforts to develop their ICT plans, there was the potential for transformational impact on various sectors of society, including agriculture, education, and health. It was important. However, for all countries to recognize that there are no “one size fits all” solutions and that policy responses should be developed within country-specific contexts.

### **3. Presentation 2: Digital inclusion in the United Nations system**

11. During the second presentation, the Associate Programme Management Officer in the CKMC provided a definition for digital inclusion and explained related concepts and terminologies within the United Nations system. Key United Nations documents that provided frameworks for understanding digital inclusion were also highlighted, including the Report of the United Nations Secretary-General’s High-level Panel on Digital Cooperation, *Age of digital interdependence* (2019), *Secretary-General’s Roadmap for Digital Cooperation* (2020) and the *Global Digital Compact*. The latter advanced “shared principles for an open, free and secure digital future for all”.

12. The Associate Programme Management Officer also explored the digital inclusion and digital transformation activities and initiatives across 11 United Nations entities, including the Department of Economic and Social Affairs (DESA), Economic Commission for Latin America and the Caribbean (ECLAC), International Telecommunication Union (ITU), Office of the United Nations High Commissioner for Refugees (UNHCR), United Nations Children’s Fund (UNICEF), United Nations Conference on Trade and Development (UNCTAD), United Nations Development Programme (UNDP), United Nations Educational, Scientific and Cultural Organization (UNESCO), United Nations Human Settlements Programme (UN-Habitat), United Nations Research Institute for Social Development (UNRISD) and the Universal Postal Union (UPU).

13. The digital inclusion activities from various cooperation initiatives and multistakeholder alliances were also highlighted for these bodies: AI for Good, Alliance for Affordable Internet (A4AI), Broadband Commission for Sustainable Development, United for Smart Sustainable Cities (U4SSC), Partner2Connect Digital Coalition, EQUALS Global Partnership for Gender Equality in the Digital Age and the Partnership on Measuring ICT for Development.



#### **4. Discussion on presentations 1 and 2: “Measuring digital inclusion – initial thoughts and questions”**

14. The presentations were well received by the participants. The representative of Grenada shared that while they are in the process of carrying out digital transformation projects, a comprehensive look at digital inclusion was yet to be undertaken. He noted that there were activities regarding the bridging of the digital divide, such as providing students with devices, as well as policymaking decisions to provide access to WiFi as a public good by 2024.

15. The digital inclusion consultant underscored the importance of ensuring that there was motivation, trust and open dialogue among all stakeholders to encourage the adoption of digital inclusion initiatives in society. For example, he noted that the pursuit of digital transformation was best viewed as an exercise in change and should thus be addressed from a change management perspective. Related, there should be clarity in the benefits and risks of digital inclusion and digital transformation activities, with particular emphasis given to strategies to address security and privacy. He also recommended ensuring that there is the provision of widespread access to ICTs with members of society ultimately deciding on their use.

16. In closing the proceedings of the first day of the seminar, the Programme Management Officer of CKMC invited participants to consider their need for technical assistance which can be provided by ECLAC. He thanked everyone for their participation and invited them to rejoin the seminar on the second day.

#### **5. Presentation 3: “Internet speed divides in the Caribbean”**

17. The presentation was delivered by the Programme Management Officer, which used 2019 to 2022 speed test data from Ookla<sup>2</sup> to analyse the Internet speed in the region, Caribbean speed divides, and divides within Caribbean countries and non-independent territories themselves. Taking into consideration the multifaceted nature of digital inclusion and that bandwidth speed is an important pillar, he noted that bandwidth is a formal measure in SDG 17, where the target for SDG indicator 17.6.1 is fixed broadband subscription that is equal to or above 10 megabits per second (Mbps). This target is also aligned with the ITU Connect 2030 Agenda that emphasizes universal connectivity of at least 10 Mbps by 2030.

18. Overall, Internet speeds in the Caribbean increased significantly at the onset of COVID-19. The countries of the Organisation of Eastern Caribbean States (OECS) surpassed the regional average and were at a point of knocking on the doors of high-income countries with their fixed broadband and download speeds. Most countries increased their Internet speeds, with Grenada, Montserrat, Saint Lucia and Saint Vincent and the Grenadines experiencing a more than 6-fold increase in speeds. Most countries in the Caribbean have already met the ITU targets and the fixed broadband speeds in eight countries exceed the world median. In 2022, all countries except for Cuba met the 2030 target of 10 Mbit/s.

19. To illustrate the level of in-country disparity, bandwidth performance for five were showcased:

- (i) In Aruba, most people have a fairly good level of Internet access. The highest speeds (110–120 Mbps) are only available to 5% of the population and the lowest speeds (70–80 Mbps) are available to 14% of the population, the national average is 90 Mbps so there is some variation between the minimum and maximum bandwidth, however, overall, the reported performance are quite acceptable.

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<sup>2</sup> Ookla (2022), Mean Fixed Broadband Download Speed (Mbps): Speedtest by Ookla Global Fixed and Mobile Network Performance Maps was accessed on 15 September 2022 from <https://registry.opendata.aws/speedtest-global-performance>. Speedtest® by Ookla® Global Fixed and Mobile Network Performance Maps. Based on analysis by Ookla of Speedtest Intelligence® data for Q1 2019 to Q2 2022. Provided by Ookla and accessed 15 September 2022. Ookla trademarks used under license and reprinted with permission.

- (ii) In the British Virgin Islands, however, there was a large disparity with the lowest speed being as low as 15 Mbps and the highest being 150 Mbps with a national average of 62 Mbps. There were also location points with insufficient data which means the area did not have enough data points to be counted.
- (iii) Grenada also had a notable disparity with the lowest speed reaching 40 Mbps and highest speed reaching 180 Mbps and a national average of 99 Mbps. However, the highest speeds here were only experienced by 4% of the population and the lowest speeds were experienced by 12% of the population.
- (iv) Guyana provided a unique situation as they have large regions of rural hinterland, which probably explains the large disparity with a national average of 34 Mbps and the lowest to highest speeds ranging from 10–70 Mbps, with some rural locations not having sufficient data to be analysed. They are currently deploying satellite dishes so rural access can be expanded.
- (v) The last country for which data was presented was Saint Vincent and the Grenadines. They showed medium variance in the distribution of fixed broadband (50 to 150 Mbps) and a national average of 118 Mbps. The highest speeds of 125–150 Mbps were available to 39% of the population, the median speeds of 100–125 Mbps were available to 46% of the population and the lowest speeds of 50–70 Mbps to 9% of the population. The Parish of St. David had insufficient data. This is probably due to the eruption of the La Soufrière volcano in 2021, which displaced many persons from that Parish. As such the actual number of inhabitants there is unknown.

#### **6. Presentation 4: “Deep dive into Caribbean digital divides”**

20. During the next presentation, the Associate Programme Management Officer stated that there had been significant changes in the Caribbean subregion over the years. Using data from the World Telecommunication/ICT Indicators database 2022 and the Annual Electronics Communications Sector Review 2019–2020, she pointed out that in 19 of 22 Caribbean countries, more than 90% of the respective populations were covered by 3G and in 13 out of 22 Caribbean countries, more than 90% of the population is covered by 4G. However, that increased coverage alone did not indicate if people were connecting to the Internet.

21. She explained that while there was a generally low subscriber uptake in most countries for mobile broadband, this still represented a more than 20% increase since 2015 for most countries. Barbados, the British Virgin Islands and Saint Kitts and Nevis were the only countries to have declines in subscriptions to mobile data. This raised the question as to if the customers were moving to fixed broadband. For fixed broadband subscriptions, more than half of Caribbean countries’ growth rate were lower than the global average of 38%, with six countries even recording declines. Notwithstanding, Cuba and Haiti were growth outliers, but they had very low 2015 figures.

22. Overall, she highlighted that the Caribbean was increasingly connected, and the data showed that there was the potential for further development of digital capacity. However, there is evidence that many people still did not have access to ICTs. She concluded by acknowledging that the lack of disaggregated data made a detailed comparison of the countries and territories of the region difficult.

## 7. Discussion on presentations 3 and 4: “Digital divides”

23. The Programme Management Officer of CKMC invited participants to consider the presentations in light of the reality in their countries and territories. He also enquired if they were aware of any other research or resources that should be taken into consideration in developing national ICT agendas.

24. There was consensus amongst the participants that the data presented reflected the reality of countries and territories in the Caribbean subregion and that the presentations contained useful information. The representative of the Jamaican Ministry of Science, Energy and Technology enquired about the existence of solutions to bridge the digital divide.

25. The representative of CTU shared that digital penetration rates vary from country to country. Bahamas and Barbados for example have high penetration rates, while in Jamaica, it is low. He shared that maybe the countries with higher penetration status may need to advise the others. He added that the regulatory environment plays an important role. For example, the competitive environment in the country for the provision of facilities, the carriers that exist, and how aggressively is the regulator in pushing the service providers to improve their technologies, are critical contributors. He further explained that many factors apply, however, there is no “one size fits all” solution.

26. The second representative of the Ministry of Science, Energy and Technology of Jamaica questioned if ECLAC attempted to look into the price of connectivity for those countries with above average figures and a comparison with the average household income to determine a possible link. He also enquired about the reason for the sharp rise between 2020 and 2022, seeking to know the other factors that played into that dynamic.

27. The representative of ECTEL was appreciative of the informative presentations. She stated that speeds were increasing above averages but the concern for ECTEL was the pricing for the entry-level broadband plans in relation to the rising gross national income. The data ECTEL has comes from their service providers and recognizing the challenges that occur there, they are hoping to conduct a survey in 2023 to find out the status of broadband in their five member States.

28. The representative of Saint Lucia also expressed her gratitude for the information presented and was happy to know that some countries are above global averages. She said that the statistics reflected the reality in Saint Lucia. Her observation is that in Saint Lucia, individuals are using their smartphones and tablets as their primary interface with digital services as opposed to computers. She has observed many electronic cash registers being used by small shops and vendors and this type of digital penetration should be measured and counted, but data collection seems to be the biggest and most common problem. She admitted that there was also a literacy issue preventing people from bridging the digital divide. She offered that building awareness and helping people at the grassroots level to build capacities could help them become more relevant in the digital space.

29. In response to the questions and comments made by participants, the Programme Management Officer started by acknowledging that digital literacy was a challenge. He noted that ECLAC recently conducted an expert group meeting on the importance of time-use surveys<sup>1</sup>, which identified “use of computers” as an important element in such surveys, however, capturing the level of digital literacy remained an issue. He referred to the issue of change that came up in the previous discussion and reiterated the importance of building trust. He thanked the CTU representative for resurfacing the theme of “no one size fits all” and highlighted that the situation in each country has to be examined separately with the response efforts being appropriately tailored.

30. On the issue of pricing and connectivity, he stated that ECLAC had not yet conducted research on this topic but confirmed that digital inclusion will be the research agenda until 2024. This seminar was a precursor to the research that is scheduled for 2023, which will focus on measuring digital inclusion in the Caribbean. The aspiration is that more countries would include digital inclusion in their plans, strategies and agendas. He confirmed that pricing and affordability is not unique to our region. He gave the example of Australia, and explained that although there is widespread broadband access, the question remained as to whether it is affordable. Hence, affordability remains a priority for Australia and other countries. In this regard, some countries are seeking to make Internet and broadband a public good. As a public policy option, some countries in the Caribbean may wish to explore this approach.

31. With respect to access to data, he posed a question to the ECTEL representative regarding their human resources capacity to conduct the surveys and analyses, as well as publish the results within a reasonable timeframe. He asked if they would be using the national statistical offices (NSOs) of the five countries, or the in-house resources of ECTEL. He also enquired about the timeframe for subsequent surveys.

32. In response to the comment of the representative of Saint Lucia regarding the increased use of smart phones, he noted that in the preparatory literature review for this seminar, it was noted that in the United Kingdom, there is widespread use of such devices. In one instance, for example, the data revealed that individuals are using smart phones to complete employment forms. The question becomes then, if fixed broadband is used as the indicator in SDG 17.6.1, are these other types of interactions and connectivity being missed as a true measure of sustainable development?

33. The representative of Jamaica shared some insight on the challenges with the National Statistical Office, stating that they experienced “survey fatigue”, given the many requests for surveys and that there is a limit on how many times one can return to the population for specialized surveys. He noted that the pandemic has allowed them some reflection on new issues to measure. In Jamaica, basic ICT questions are used in their annual survey, but he asked what are the new relevant aspects that should be measured. He further questioned if similar indices should be used across the region and if there should be a meeting to seek consensus within the subregion.

34. The representative of ECTEL echoed the sentiments of the previous contribution and stated that they are working with the NSOs because of the capacity issues. She stated that in the census there were four ICT questions, but she made note of the important observation made that maybe these questions should be reviewed for relevance to the sector. She responded that in terms of sustainability, they do intend to provide support to the NSOs and have their surveys done every couple of years.

35. In responding to the question of developing regional standards, the CTU representative confirmed that in 2022 the CTU secretariat sought to broaden their capacity research. In 2023, they will seek to undertake an internal project related to development of a dashboard for Caribbean development statistics. They will examine it from a research perspective in the first instance.

36. The Programme Management Officer reiterated that ECLAC is willing and able to contribute their research experience. This was welcomed by the CTU representative.

## **8. Presentation 5: “Overview of measurement approaches”**

37. During this presentation, the Programme Management Officer shared the measurement approaches that were adopted by four countries, namely Australia, New Zealand, the United Kingdom and Trinidad and Tobago. In the case of Australia, the dimensions emphasized were access, affordability and digital ability. There is an “Australian Digital Inclusion Index” to measure digital inclusion, by the Australian National University in collaboration with the Australian Communications and Media Authority.

Elements that they pay particular attention to are the dimensions with regard to indigenous peoples and Languages Other Than English (LOTE).

38. In the case of New Zealand, focus was placed on the indigenous population there and the four elements of digital inclusion: (i) motivation, (ii) access, (iii) skills and (iv) trust. They also hypothesize that digital inclusion impacts well-being and consider that those who do not participate are missing out on opportunities and services. They have a “Digital Inclusion Outcomes Framework” and their approach is people centred.

39. In the case of the United Kingdom, although no formal definition of digital inclusion was included in their strategies, it was deduced that it was directly related to people having the capability to use the Internet for their day-to-day benefit; having digital skills, connectivity and accessibility. They use the Digital Inclusion Scale for Individuals to report inclusion, leveraging their communications regulator’s (Ofcom) surveys, as well as the Office for National Statistics (ONS) Internet Access Quarterly Update and Internet access surveys (households and individuals) for data.

40. With respect to Trinidad and Tobago, he highlighted some aspects of the Telecommunications Authority of Trinidad and Tobago (TATT) National Digital Inclusion Survey 2021. He also noted that there was a Digital Inclusion Index and ICT Development Index available on the TATT website <https://tatt.org.tt/UniversalService/DigitalDivideInclusion.aspx>. They also use the four traditional indicators of digital inclusion: (i) motivation, (ii) access, (iii) skills and (iv) trust.

#### **9. Presentation 6: “Overview of multi-country measurement frameworks related to digital inclusion”**

41. During the final presentation of the seminar, the Associate Programme Management Officer reviewed multi-country frameworks for measuring digital inclusion and shared specific examples that could be considered for the Caribbean subregion. She stated that there is no universally accepted digital inclusion measurement framework. However, there are several frameworks and indexes that cover various aspects of digital transformation and, therefore, include ICT indicators.

42. She highlighted the role of ITU in the collection, verification and harmonization of ICT data, UNCTAD data collection on the digital economy and e-commerce; UNESCO Internet Universality Indicators for assessing Internet development; and the Partnership on Measuring ICT for Development’s core list of ICT indicators. She stated that they all contain sound methodologies developed by experts in their fields. The challenge may be identifying what is needed for a methodologically sound framework that is feasible to implement within the Caribbean. All aspects need to be critically examined to ensure that they are fit-to-purpose.

43. According to a report by Digital Future Society, “Measuring the margins” (2020), the four key dimensions for measuring digital inclusion are: (i) access, (ii) skills, (iii) use and (iv) supportive environment. It underscores disaggregation of the data by geography and demography and monitoring over time. She expounded upon the indexes that considered Caribbean countries in their global focus such as the International Telecommunication Union (ITU) ICT Development Index (IDI), United Nations E-Government Development Index, GSMA Mobile Connectivity Index, World Economic Forum (WEF) Global Competitiveness Index (GCI), A4AI Affordability Drivers Index (ADI), Economist Intelligence Unit (EIU) Inclusive Internet Index (III), World Intellectual Property Organization (WIPO) Global Innovation Index (GII) and noted that territories were not included in any of the indexes referenced in the framework. The focus areas, topics and issues that were covered by these indexes and frameworks include the digital divide, e-government, mobile internet connectivity, competitiveness, ICT adoption, e-participation, digital skills, affordability, access, infrastructure, availability, relevance, readiness and innovation.

44. She stated that it was noteworthy that of the 29 Caribbean Development and Cooperation Committee (CDCC) member States and associate members, only the 16 member States were covered by these indexes. And of those 16, only two countries are covered by all seven: the Dominican Republic and Jamaica. She identified this gap as an opportunity to consider the development of a Digital Inclusion Index for the Caribbean, as well as for individual countries and territories.

45. She commented that although the indices measure different phenomena, they each relate to digital inclusion or the digital divide. Many of the ICT indicators are derived from ITU, United Nations E-Government Development Index and GSMA Mobile Connectivity Index with recurring concepts of access, affordability, skills, content, security and policies. While examining the methodologies, she noted that in some cases, the indices looked at input indicators, such as available infrastructure; output indicators, such as actual Internet speed; or both. In summary, her findings showed that several methodologies are available, with some frameworks presenting different types of ranking systems.

46. She also underscored that the scale used for several indicators was not necessarily appropriate for the small countries of the Caribbean. For example, there is an indicator that measures the number of Internet exchange points per million people, which may lead to confusion, because the proportion would far exceed the actual number of Internet exchange points that are available. She also stressed the importance of analysing the underlying methodologies, taking into consideration the size and capacity realities in the subregion.

47. In conclusion, she identified several issues which should be considered within the Caribbean context. These included consideration of the purpose of the index being developed, the use of culturally and SIDS-relevant elements of digital inclusion and the identification of reliable data sources. She also recommended that data disaggregation, scale issues as well as approaches to including data from the territories as critical considerations.

#### **10. Discussion on presentations 5 and 6: “Measuring digital inclusion in the Caribbean – key considerations and needs”**

48. The representative of CTU expressed particular appreciation for the last two presentations, indicating that they provided a very good synopsis of their intended plans for future work and he assured that there would be collaboration with ECLAC.

49. The representative of Belize agreed that the presentations were very informative and confirmed that Belize was open to collaboration and the sharing of strategies regarding legislation and their efforts to align with the national telecommunication body to bridge the divide within their national development agenda. He believes that they have been advancing well but notes that data are needed so that this progress can be measured to enable regional and international confirmation that key productivity indicators are being met. Belize will conduct a Digital Connect Centres project to train the ageing and youth in using electronics in rural areas. He would like to see more of what is being done in the region so that collaborations can be pursued and there can be the promotion of capacity building in the region to move into a digital economy.

50. The representative of the Jamaican Productivity Centre expressed gratitude for the organizational indices presented as he directly works with clients who will find that information very useful. In response, the Programme Management Officer indicated that although it was not discussed in detail, the United Kingdom conducted digital inclusion research which is specifically targeted to the business sector as well and not just households.

## **11. Conclusion and closing remarks**

51. In closing, the Associate Programme Management Officer thanked participants for attending the virtual seminar and expressed her gratitude for their active participation, as well as for the concerns and needs they shared regarding digital inclusion. She reaffirmed that this topic would continue to be part of the Commission's research agenda in the coming years. She took note of the key points and feedback regarding affordability, NSO capacity challenges and suggested that these could be incorporated into future research focus areas. Finally, she expressed her appreciation for the kind sentiments of the participants towards the presentations and the Commission's recent research and looked forward to subsequent engagements.

Annex I**LIST OF PARTICIPANTS****A. Member States****ANTIGUA AND BARBUDA**

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Annex II

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Seminar:  
“Measuring Digital inclusion in the Caribbean”  
Port of Spain, 15-16 December 2022  
1000 hrs – 12 noon (UTC-4)  
**Meeting type: VIRTUAL**

**PROGRAMME**

Thursday 15 December 2022

- |                     |   |
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| 1000 hrs – 1015 hrs | <p><b>Opening of the meeting</b></p> <ul style="list-style-type: none"> <li>- Welcome Remarks<br/>Dale Alexander on behalf of Ms. Diane Quarless, Director,<br/>ECLAC subregional headquarters for the Caribbean</li> </ul>   |
| 1015 hrs – 1030 hrs | <p><b>Participant Introductions</b></p>   |
| 1030 hrs – 1100 hrs | <p><b>Presentation: “Importance of digital inclusion to the Caribbean”</b></p> <ul style="list-style-type: none"> <li>- Dale Alexander, Programme Management Officer, Caribbean Knowledge Management Centre, ECLAC, subregional headquarters for the Caribbean</li> </ul> |
| 1100 hrs – 1130 hrs | <p><b>Presentation: “Digital inclusion in the United Nations system”</b></p> <ul style="list-style-type: none"> <li>- Lika Døhl Diouf, Associate Programme Management Officer, ECLAC, subregional headquarters for the Caribbean</li> </ul>                               |
| 1130 hrs – 12 noon  | <p><b>Discussion: “Measuring digital inclusion: Initial thoughts and questions”</b></p> <ul style="list-style-type: none"> <li>- Dale Alexander, Caribbean Knowledge Management Centre, ECLAC, subregional headquarters for the Caribbean</li> </ul>                      |

Friday 16 December 2022

- 1000 hrs – 1020 hrs      **Presentation: “Internet speed divides in the Caribbean”**  
 - Dale Alexander, Caribbean Knowledge Management Centre, ECLAC, subregional headquarters for the Caribbean
- 1020 hrs – 1040 hrs      **Presentation: “Deep dive into Caribbean digital divides”**  
 - Lika Døhl Diouf, Caribbean Knowledge Management Centre, ECLAC, subregional headquarters for the Caribbean
- 1040 hrs – 1055 hrs      **Discussion: “Digital Divides”**  
 - Dale Alexander, Caribbean Knowledge Management Centre, ECLAC, subregional headquarters for the Caribbean
- 1055 hrs – 1100 hrs      5-minute break
- 1100 hrs – 1115 hrs      **Presentation: “Overview of measurement approaches”**  
 - Dale Alexander, Caribbean Knowledge Management Centre, ECLAC, subregional headquarters for the Caribbean
- 1115 hrs – 1135 hrs      **Presentation: “Overview of multi-country measurement frameworks related to digital inclusion”**  
 - Lika Døhl Diouf, Associate Programme Management Officer, ECLAC, subregional headquarters for the Caribbean
- 1135 hrs – 1155 hrs      **Discussion: “Measuring digital inclusion in the Caribbean: Key considerations and needs”**  
 - Dale Alexander, Caribbean Knowledge Management Centre, ECLAC, subregional headquarters for the Caribbean
- 1155 hrs – 12 noon      **Conclusion and Closing Remarks**  
 - Lika Døhl Diouf, Associate Programme Management Officer, ECLAC, subregional headquarters for the Caribbean



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